



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/508,888	09/23/2004	Masayuki Adachi	5404/92	9842

757 7590 06/20/2006

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, IL 60610

EXAMINER

PIZIALI, ANDREW T

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 06/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/508,888

Applicant(s)

ADACHI ET AL.

Examiner

Andrew T. Piziali

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/6/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informality: The claim language is clunky because the percentages and parts are given after the material (such as “antimony compound 25 to 50 parts by weight”). It is suggested that claim 1 be amended to give the percentages and parts before the material (such as 25 to 50 parts by weight antimony compound). Appropriate correction is requested.

Claim Rejections - 35 USC § 102/103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over USPN 5,348,796 to Ichibori et al. (hereinafter referred to as Ichibori).

Regarding claims 1 and 2, Ichibori discloses a flame resistant union fabric obtained by

Art Unit: 1771

co-weaving: a compound yarn (A) 30% to 70% by weight obtained by compounding a halogen-containing flame resistant fiber (a-1) including an antimony compound 25 to 50 parts by weight in an acrylic based copolymer 100 parts by weight obtained by polymerizing a monomer mixture including acrylonitrile 30% to 70% by weight, a halogen containing vinyl based monomer 30% to 70% by weight, and a vinyl based monomer copolymerizable therewith 0% to 10% by weight, and another fiber (a-2) (see entire document including column 2, lines 3-16, column 3, lines 6-17, column 4, lines 59-68, column 5, lines 17-30, and claims 1-13). In the event that it is shown that the applied prior art does not disclose the claimed embodiment with sufficient specificity, the invention is obvious because the prior art specifically discloses the claimed constituents and the claimed weight ranges.

Ichibori disclose that fabric may be 100% by weight compound yarn (A) (column 5, lines 17-30) wherein the other fiber (a-2) of the compound yarn is cellulosic (column 4, lines 59-68). Therefore, the disclosed 100% compound yarn fabric reads on the claimed fabric comprising 30 to 70% compound yarn (A) and 70 to 30% cellulosic fiber yarn (B).

Ichibori does not appear to specifically mention that the compound yarn (A) would have an elongation percentage less than 5% under a condition of a load of 300 mg/metric count of No. 17, and of a temperature range of 100 degrees C to 500 degrees C, but considering that the compound yarn taught by Ichibori is identical to the claimed compound yarn, the compound yarn taught by Ichibori appears to inherently possess the claimed property.

The Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or

Art Unit: 1771

substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977).

Regarding claim 2, Ichibori discloses the cellulosic fiber may be cotton, rayon, acetate, or the like (column 4, line 59 through column 5, line 3).

Claim Rejections - 35 USC § 103

5. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,348,796 to Ichibori in view of Applicant's Disclosure.

Regarding claims 1 and 2, Ichibori discloses a flame resistant union fabric obtained by co-weaving: a compound yarn (A) 30% to 70% by weight obtained by compounding a halogen-containing flame resistant fiber (a-1) including an antimony compound 25 to 50 parts by weight in an acrylic based copolymer 100 parts by weight obtained by polymerizing a monomer mixture including acrylonitrile 30% to 70% by weight, a halogen containing vinyl based monomer 30% to 70% by weight, and a vinyl based monomer copolymerizable therewith 0% to 10% by weight, and another fiber (a-2) (see entire document including column 2, lines 3-16, column 3, lines 6-17, column 4, lines 59-68, column 5, lines 17-30, and claims 1-13).

Ichibori does not appear to specifically mention co-weaving the compound yarn (A) with a different second yarn, but the applicant discloses that it is known in the art to use cellulosic fibers as a warp and a halogen-containing flame resistant fiber including antimony compounds as

Art Unit: 1771

the weft yarn for interior design products, such as curtains and chair coverings, because special features of cellulosic fibers, such as natural feeling, hygroscopic property, and heat resistance, can be exhibited (see page 1, line 23 through page 2, line 13 of the current specification). It would have been obvious to one having ordinary skill in the art at the time the invention was made to form a woven fabric with cellulosic fibers as the warp and the halogen-containing flame resistant fibers of Ichibori as the weft, because the fabric could be used for interior design products such as curtains and chair coverings which would then possess natural feeling, hygroscopic property, and/or heat resistance.

Ichibori does not appear to specifically mention that the compound yarn (A) would have an elongation percentage less than 5% under a condition of a load of 300 mg/metric count of No. 17, and of a temperature range of 100 degrees C to 500 degrees C, but considering that the compound yarn taught by Ichibori is identical to the claimed compound yarn, the compound yarn taught by Ichibori appears to inherently possess the claimed property.

Regarding claim 2, the applicant is silent with regards to specific conventional cellulosic materials, therefore, it would have been necessary and thus obvious to look to the prior art for conventional cellulosic materials. Ichibori provides this conventional teaching showing that it is known in the art to use cellulosic materials such as cotton, rayon, acetate, or the like (column 4, line 59 through column 5, line 3). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the cellulosic warp material from cotton, rayon, acetate, or the like, motivated by the expectation of successfully practicing the invention and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability and desired characteristics.

International Preliminary Examination Report

6. The International Preliminary Examination Report cited the following Japanese documents:

JP 2593985

JP 2593986

The US equivalent for these cases is USPN 4,863,797. These documents were not specifically used to reject the claims, but the primary reference used to reject the claims (USPN 5,348,796 to Ichibori) claims priority to said US equivalent and was utilized due to the teachings of the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1771

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

atp

gpb 5/27/06

ANDREW T. PIZALI
PATENT EXAMINER